## **ASSIGNMENT 3**

"Air-Launched Guided Missiles and Guided Missile Launchers," Textbook Assignment: chapter 3, pages 3-1 through 3-36.

- 3-1. Long-range missiles are usually capable of traveling what minimum number of miles?
  - 100 miles
  - 2. 200 miles
  - 3. 300 miles
  - 4. 400 miles
- 3-2. Speeds from Mach 0.8 to Mach 1.2 are referred to by what term?
  - 1. Subsonic
  - 2. Transonic
  - 3. Supersonic
  - 4. Hypersonic
- Speeds from Mach 1.2 to Mach 5.0 3-3. are referred to by what term?

  - Subsonic
     Transonic
  - 3. Supersonic
  - 4. Hypersonic
- Speeds up to Mach 0.8 are referred 3 - 4. to by what term?
  - 1. Subsonic
  - 2. Transonic
  - 3. Supersonic
  - 4. Hypersonic
- Speeds above Mach 5.0 are referred 3-5.to by what term?

  - Subsonic
     Transonic
  - 3. Supersonic
  - 4. Hypersonic
- 3-6. A missile with a rated speed of Mach 3.2 is fired from an aircraft that is flying at a speed of Mach 2.6. What is the missiles actual speed after being launched?
  - 1. Mach 0.6
  - 2. Mach 2.6
  - 3. Mach 3.2
  - 4. Mach 5.8
- 3-7. A service missile is usually referred to as what type of missile?
  - 1. A practice missile
  - 2. A tactical missile
  - 3. A dummy missile
  - 4. A training missile

- 3-8. A training missile is classified as what type of missile?
  - 1. A nonactive missile
  - 2. A nonservice missile
  - 3. A tactical missile
  - 4. A service missile
- 3-9. To prevent certain types of exercise missiles from traveling beyond the target range, what safety measure should be installed in the missiles?
  - 1. A tracing flare
  - 2. An explosive destruct charge
  - 3. A telemetry-type warhead
  - 4. A preprogrammed computer system
- 3-10. A guided missile is designed to be air launched as an intercept aerial missile. It is the 9th design and the 12th modification of the design. What designator is assigned to the missile?
  - 1. AGM-9B
  - 2. AGM-91
  - 3. AIM-9G
  - 4. AIM-9L
- 3-11. Which of the following color codes are used in missile identification?

  - Yellow, brown, and black
     Yellow, brown, and blue
     Blue, orange, and red
     Blue, orange, and green
- 3-12. You can find the serial number of a missile on which of the following missile components?
  - 1. The leading component

  - 2. The motor
    3. The tail section
  - 4. The explosive section
- To find information on the 3-13. identification of guided missiles, you should refer to which of the following NAVAIR publications?
  - 11-1-117
  - 2. 11-5E-18
  - 3. 11-15-7
  - 4. 16-1-529

- 3-14. missile?
  - 1. The nose section

  - 2. The armament section
    3. The guidance section
    4. The propulsion section
- In semiactive homing, target 3-15. illumination comes from which of 3-21. the following sources?
  - 1. The missile's guidance section
  - 2. The missile's control section
  - 3. An external source to the missile
  - 4. A radar receiver
- Passive homing is similar to active homing in which of the following 3-22. 3-16. ways ?
  - 1. Passive homing does not require a control section

  - 2. Passive homing requires an control of the launching services and control of the aircraft
  - 4. Passive homing operates independently of the launching aircraft
- A high-explosive warhead used in an air-to-air guided missile contains 3-17. what range of explosives?
  - 1. 75 to 100 lb
  - 2. 35 to 65 lb

  - 3. 10 to 18 lb 4. 5 to 10 lb
- What are the two types of general 3-18. fuzes used in guided missiles?

  - Impact and mechanical
     Impact and electrical
     Contact and electrical
     Contact and proximity
- 3-19.
- The safety and arming device on a missile is used for what purpose?

  1. To prevent arming if the missile is fired accidently
  2. To maintain the explosive train of the fuzing system in a safe condition until certain

  1. It is a supersonic missile 2. It is an air-to-air missile 3. It is launched from an interceptor aircraft 4. Each of the above 4. Each of the above 5. What type of guidance system is used in an AIM-7F guided missile 5. condition until certain requirements are met
  - requirements are met
    3. To prevent the missile from being accidently fired when the
  - aircraft is not airborne 3. Passive 4. To maintain the explosive train 4. Command of the fuzing system in an unsafe condition before firing the missile

- Which of the following missile 3-20. Which of the following propulsion components is the brain of the systems does NOT require oxygen from the atmosphere for its operation?
  - 1. Thermal jet
  - 2. Turbojet
  - 3. Pulsejet
  - 4. Ramjet
  - Missile propulsion systems use which of the following basic types of jet power plants?
    - 1. Solid propellant grain only
    - 2. Liquid propellant motor only
    - 3. Solid propellant grain and liquid propellant motor
    - 4. Atmospheric jet and thermal jet
  - What propulsion system is currently being used in Navy air-launched missiles as an atmospheric jet propulsion system?
  - 3-23. Which of the following missile propulsion systems is NOT a thermal jet propulsion system?

    - Solid propellant
       Liquid propellant
    - 3. Gas propellant
    - 4. Combined propellant
    - A guided missile that incorporates 3-24. both a boost phase and a sustaining thrust phase has what designation?
      - 1. DTRM
      - 2. DPRM
      - 3. DRM
      - 4. DRTS
    - Which of the following statements describes an AIM-7F guided missile?
    - used in an AIM-7F guided missile

      - 2. Semiactive

- 3-27. In an AIM-7F guided missile, the flight control section consists of which of the following components?
  - 1. A target seeker
  - 2. An autopilot only
  - 3. A hydraulic group only
  - 4. An autopilot and a hydraulic
- 3-28. In an AIM-7F guided missile, the warhead is in what location?
  - 1. Between the flight control section and autopilot
  - 2. Between the target seeker and flight control section
  - 3. Between the hydraulic group and the autopilot
    4. Between the target seeker and
  - autopilot
- 3-29. In an AIM-7F guided missile, what device prevents the motor from being accidently fired?
  - A safety and arm device
     A safe/arm igniter

  - 3. A shorting cap
  - 4. A shorting pin
- 3-30. To reposition the safe/arm assembly in an AIM-7F guided missile, what tool should you use?
  - 1. An arming key
  - 2. A screwdriver
  - 3. A 1/2-inch wrench
  - 4. A 1/4-inch wrench
- 3-31. An AGM-84A-1 guided missile is designed to be used against which of the following targets?
  - Ships
  - 2. Bunkers
  - 3. Personnel 4. Tanks
- What type of guidance system is 3-32. used in a Harpoon guided missile?
  - 1. Semiactive
  - 2. Command
  - 3. Passive
  - 4. Active
- 3-33. The missile battery is located in what section of a Harpoon guided missile?
  - The warhead section 1
  - 2. The guidance section
  - The sustainer section
  - The boattail section

- 3-34. The control fins should be attached to what section of a Harpoon missile?
  - The warhead section
  - 2. The sustainer section
  - 3 The boattail section
  - The quidance section
  - 3-35. What type of guidance system is used in a Sidewinder guided missile?
    - 1. Passive
    - 2. Active
    - 3. Passive infrared target detection
    - 4. Semiactive infrared target detection
  - 3-36. A Sidewinder guided missile has what total number of major components?
    - 1. Five
    - 2. Seven
    - Three
    - 4. Nine
  - 3-37. The control fins should be attached to what section of a Sidewinder quided missile?
    - The warhead section 1.
    - 2. The rocket motor section
    - 3. The target detector section
    - The guidance and control section
  - 3-38 What warhead is used in an AIM-9L quided missile?
    - 1. WDU-77/B
    - 2. WDU-17/B
    - 3. Mk 34
    - 4. Mk 43
  - 3-39 What modification of a Mk 39 rocket motor is equipped with a safe-arm ignition assembly?
    - 1. Mod 9
    - 2. Mod 8
    - 3. Mod 7
    - 4. Mod 6
  - 3-40 To reposition the safe-arm ignition assembly of a Mk 39 Mod 8 rocket motor, what tool should you use?
    - 1. A hex-head T-handle

    - 2. A screwdriver 3. An arming key
    - 3. An arming key4. An allen wrench

- 3-41. What type of guidance system is 3-49. used in the Walleye I weapon?

  - Active homing
     Semiactive homing
     Closed-circuit television
  - 4. Closed-loop radar tracking
- 3-42. A Walleye I series weapon is in what specified weight class?
  - 1. 500 lb
  - 2. 1,000 lb
  - 3. 1,500 lb
  - 4. 2,000 lb
- 3-43. A Walleye II series weapon is in what specified weight class?
  - 500 lb 1.
  - 2. 1,000 lb 3. 1,500 lb

  - 4. 2,000 lb
- An AIM-54C guided missile uses 3-51. which of the following types of guidance systems?

  - Active only
     Semiactive only
  - 3. Passive only
  - 4. Active, semiactive, and passive
- 3-45. A Maverick missile uses what type of guidance system?
  - 1. Laser
  - 2. Active
  - 3. Passive
  - 4. Command
- There is to be a multiple missile 3-46. attack by the use of simultaneous guidance against widely separated 3-53. The nitrogen receiver assembly in targets. What maximum number of an LAU-7/A guided missile launcher AIM-54C guided missiles can be launched from a single aircraft?
  - 1. Seven
  - 2. Six
  - 3. 4. Five
  - Four
- An AGM-88A guided missile is An AGM-88A guided missile is designed to operate in what total number of modes?
  - 1. One
  - 2. Two
  - 3. Three
  - 4. Four
- 3-48. The designation AGM-65E identifies what missile?
  - 1. Harpoon

  - Shrike
     Sidewinder
  - 4. Maverick

- What are the major assemblies of the LAU-7 guided missile launcher?
  - 1. Housing, nitrogen receiver, power supply, and electrical converter
  - 2. Housing, mechanism, power supply, and nitrogen receiver
  - 3. Housing, nitrogen receiver, and power supply
  - 4. Housing, mechanism, and nitrogen receiver
- 3-50. The pressure indicator on the nitrogen receiver assembly in the LAU-7/A guided missile launcher is yellow. What approximate amount of nitrogen is available?
  - 1. 0.0 to 2.1 psi
  - 2.2 to 2.8 psi
  - 2. 2.9 to 3.4 psi
  - 4. 3.5 to 5.0 psi
- Which of the following guided missile launchers is a complete launching system used with AIM-9 series missiles?
  - 1. LAU-7/A
  - 2. LAU-115/A
  - 3. Aero 5B-1
  - 4. Aero 7A
- In the LAU-7/A guided missile 3-52. launcher, the missile's IR detector
  is cooled by what means?
  - 1. A ram air turbine
  - 2. Ambient air
  - 3. A nitrogen receiver
  - 4. Induction air
- an LAU-7/A guided missile launcher can store what total amount of nitrogen?
  - 1. 1,200 psig
  - 2. 2,200 psig

  - 3. 3,200 psig 4. 4,200 psig
- 3-54. In an LAU-7/A guided missile launcher, the nitrogen control valve is controlled by what means?
  - 1. The pilot 2. The NFO

  - 3. An IR detector
  - 4. A thermocouple

- 3-55. assembly is accessible through which of the following components?
  - The aft fairing assembly
  - 2. The snubber mount fitting assembly
  - 3. The forward fairing assembly
  - 4. The power supply
- To prevent interference with the 3-56. missile hangers during launch, what 3-62. component of an LAU-7/A guided missile launcher shears the umbilical cord?
  - The snubbers
  - 2. The mechanism assembly
  - 3. The aft fairing latch assembly
  - 4. The umbilical hook support assembly
- When in the closed position, what 3-63. 3-57. assembly in an LAU-7/A guided missile launcher locks the aft missile hanger in place?
  - The detent 1.
  - 2. The mechanism
  - The mechanism
    The aft fairing latch 3. The aft fairing late 4. The forward fairing
- To obtain information on an LAU-7/A guided missile launcher, you should 3-58. refer to which of the following NAVAIR publications?
  - 1. 11-100-1.1 2. 11-85-5 3. 11-75A-54

  - 4. 11-1-116B
- 3-59. The aft striker point in the LAU-7/A guided missile launcher is used to make contact between what components?
  - 1. The missile and the firing safety switch
  - 2. The missile IR detector and the nitrogen control switch
  - 3. The missile power supply and the electrical wiring harness
  - 4. The electrical wiring harness and the nitrogen control switch
- 3-60. The AUR concept simplifies guided missile handling at the user level as a result of which of the following characteristics?

  - Improved reliability
     Improved availability
     Improved logistics support
     Each of the above

- An LAU-7/A umbilical hook support 3-61. The service life of a guided missile begins at which of the following times?
  - When it is placed in the 1. shipping container When it is received as an AUR
  - 2.
  - 3. When it is assembled as an AUR
  - 4. When it is removed from the shipping container
  - A mobile missile maintenance unit (MMMU) is used for what purpose?
    - To repair missiles aboard ship
    - 2. To containerize missiles before shipment
    - 3. To maintain the fleet's overseas missile stockpile
    - 4. To upgrade missiles from non-RFI to RFI status
  - Under the AUR concept, missiles are received aboard ship completely assembled with which of the following exceptions?
    - 1. Fuzes
    - 2. Detonators

    - 3. S&A devices 4. Wings and fins
  - Aboard ship missiles that are deep stowed in their sealed containers can be off-loaded as what type of material?

    - 1. RFI 2. Non-RFI
    - 3. Code E
    - 4. Code F
  - 3-65. The seal on a container of wings and fins has been broken. This container should be tagged and off-loaded as what type of material?
    - 1. Code D
  - Code F
     Non-RFI
    - 4. RFI